

AMENDMENTS AND LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A method for forming an electroplated electrical interconnect on an integrated lead suspension or suspension component of the type having a spring metal layer, a conductive lead layer and an insulating layer separating portions of the spring metal and conductive lead layers, including:

forming an aperture through at least the insulating layer and exposing the spring metal layer at an interconnect site;

applying an interconnect mask around the interconnect site;

electroplating a first conductive material on the spring metal layer at the interconnect site to form a plated interconnect having the physical structure of the conductive material as electroplated, including building up the first conductive material on the spring metal layer to a height about equal to or greater than a surface of the conductive lead layer, then with continued electroplating, contacting and forming an electrical connection to any unmasked portions of the conductive lead layer, and also plating onto and building up the first conductive material onto any unmasked portions of the conductive lead layer;

removing the interconnect mask; and

incorporating the integrated lead suspension or suspension component, including the plated interconnect having the physical structure of the conductive material as electroplated, into a disk drive.

2. (Previously Presented) The method of claim 1 and further including electroplating a second conductive material on the plated interconnect.

3. (Previously Presented) The method of claim 2 wherein electroplating the second conductive material on the plated interconnect includes electroplating the plated interconnect with non-corrosive metal.

4. (Previously Presented) The method of claim 2 wherein electroplating the second conductive material on the plated interconnect includes electroplating the plated interconnect with gold.

5. (Previously Presented) The method of claim 1 wherein electroplating the first conductive material includes forming a plated nickel or nickel alloy interconnect.

6. (Previously Presented) The method of claim 1 wherein electroplating a first conductive material includes electroplating the first conductive material on the spring metal layer and not in contact with the conductive lead layer to form a plated bond pad interconnect that is electrically isolated from the conductive lead layer.

7. (Previously Presented) The method of claim 1 wherein:
forming an aperture includes forming an aperture through the insulator layer and at least one of the spring metal layer and conductive lead layer to expose portions of the spring metal and conductive lead layers at the interconnect site; and
electroplating the first conductive material includes electroplating the first conductive material on the spring metal layer at the interconnect site to form an electrical interconnect between the spring metal layer and the conductive lead layer, including causing the first conductive material to build up on the spring metal layer, and with continuing build up to reach a thickness at which the first conductive material electroplates onto and builds up on the conductive lead layer.

8. (Canceled)

9. (Previously Presented) The method of claim 7 wherein:
forming an aperture includes forming an aperture through the insulator layer and the
spring metal layer but not the conductive lead layer; and
electroplating the first conductive material includes forming a spring metal side
interconnect.

10. (Previously Presented) The method of claim 7 and further including
electroplating conductive metal on exposed portions of the conductive lead layer at the
interconnect site before forming the spring metal side contact.

11. (Previously Presented) The method of claim 7 wherein:
forming an aperture includes forming an aperture through the insulator layer and the
conductive lead layer but not the spring metal layer; and
electroplating the first conductive material includes forming a conductive lead side
interconnect.

12. (Previously Presented) The method of claim 1 and further including removing
oxide from exposed portions of the spring metal layer at the interconnect site before
electroplating the first conductive material to form the plated interconnect.

13. (Original) The method of claim 12 wherein removing oxide includes:
exposing the interconnect site to a plating metal bath; and
applying current to the interconnect site to perform an anodic clean.

14. – 22. (Canceled)

23. (Previously Presented) The method of claim 1 wherein electroplating the first
conductive material includes electroplating the first conductive material on the spring metal

layer at the interconnect site to form an electrical interconnect between the spring metal layer and the conductive lead layer, including causing the first conductive material to build up on the spring metal layer, and with continuing build up to reach a thickness at which the first conductive material electroplates onto and builds up on unmasked portions of the conductive lead layer at the interconnect site.

24. (New) The method of claim 23 wherein:
the suspension or suspension component has a stainless steel spring metal layer; and
electroplating a first conductive material includes electroplating nickel to form a
nickel interconnect on the stainless steel layer.
25. (New) The method of claim 1 wherein:
the suspension or suspension component has a stainless steel spring metal layer; and
electroplating a first conductive material includes electroplating nickel to form a
nickel interconnect on the stainless steel layer.
26. (New) The method of claim 7 wherein:
the suspension or suspension component has a stainless steel spring metal layer; and
electroplating a first conductive material includes electroplating nickel to form a
nickel interconnect on the stainless steel layer.
27. (New) The method of claim 13 wherein:
the suspension or suspension component has a stainless steel spring metal layer; and
electroplating a first conductive material includes electroplating nickel to form a
nickel interconnect on the stainless steel layer.